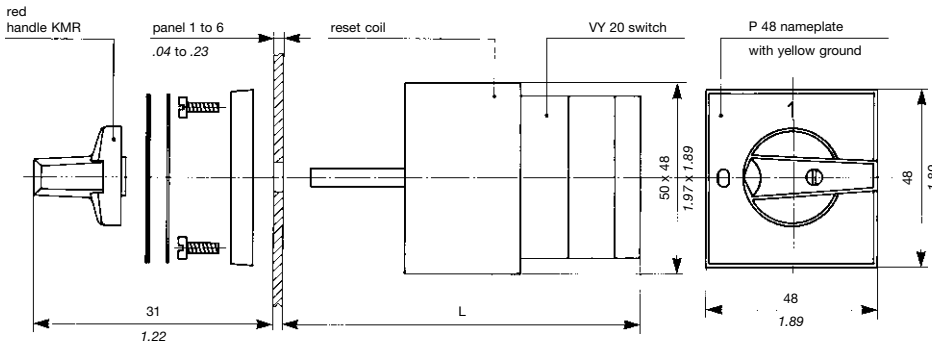


standard safety switches

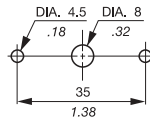
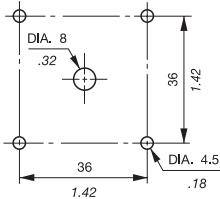


MOUNTING METHOD



L = single-phase unit 51.8 2.04 three-phase unit 64.8 2.55

DRILLING (2 possibilities)



the CVK marker-holder cannot be mounted with this drilling

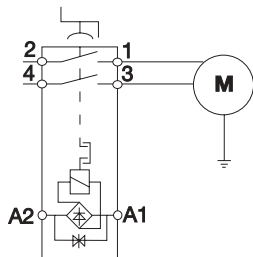
Choice of screws corresponding to the panel thickness

| | PANEL THICKNESS | | | | | |
|---------------------|-----------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| WITHOUT NAMEPLATE | 9.5 2 screws : .37 | 9.5 2 screws : .37 | 9.5 4 screws : .37 | 2 screws or 9.5 4 screws : .37 | 2 screws or 9.5 4 screws : .37 | 2 screws or 9.5 4 screws : .37 |
| WITH NAMEPLATE P 48 | 9.5 4 screws : .37 | 2 screws or 9.5 4 screws : .37 | 2 screws or 9.5 4 screws : .37 | 2 screws or 9.5 4 screws : .37 | 12.7 4 screws : .50 | 12.7 4 screws : .50 |

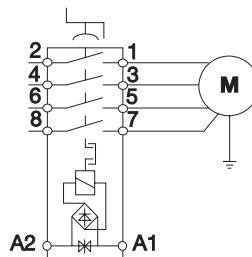
NOTE : The standard unit is delivered with 9.5 mm .37 screws (12.7 .50 screws on request).

DIAGRAMS

single-phase diagrams VY 20 / D / 012 RAMT /



three-phase diagrams VY 20 / D 014 RAMT /



- UTILIZATION safety switch

Protects the industrial machine operator against unexpected re-starting following a network voltage break.

- OPERATION interruptor

with 2 contacts (single-phase)
or with 4 contacts (three-phase).
This switch automatically returns to the position "O".
It is not possible to maintain the handle in position "1" (on) as long as the voltage is not present.

- FEATURES

- mechanical :

- Life 10⁶ operations.
- IP 65 front face protection.
- 6 protection against dust penetration
- 5 protection against water jets.
- NEMA 4

- electrical :

This unit is based on a cam switch-rating 20 A (VY 20).
IEC 408 standard :

| | | |
|----------------------|--------------|----------------|
| AC 21 - 16 A - 380 V | single-phase | 3 kW - 220 V |
| AC 3 | three-phase | 4 kW - 220 V |
| | | 7.5 kW - 380 V |

UL 508 standard :

| | |
|--------------|---------------|
| single-phase | 1 HP - 120 V |
| | 2 HP - 240 V |
| three-phase | 5 HP - 240 V |
| | 10 HP - 480 V |

Supply voltage of the reset coil : 220 V or 380 V - 50 Hz
other voltages on request (e.g. 110 V - 60 Hz)

Voltage to be specified when ordering.

Insulation voltages :

- VDE group C 750 V~ AC - 900 V= DC
- UTE category C 500 V~ AC and = DC
- CSA 600 V
- UL 600 V

connection :

- by M 3.5 screw with self-lifting shakeproof clamp.
 - 1 conductor of 0.75 mm² min. or n°18 AWG min.
 - 2 conductors of 4 mm² max. or n°12 AWG max.
- In order to use the switch correctly, the reset coil (terminals A1, A2) must be connected between 2 phases or between phase and neutral or to any other signal permitting to detect a supply voltage failure.

For ordering :

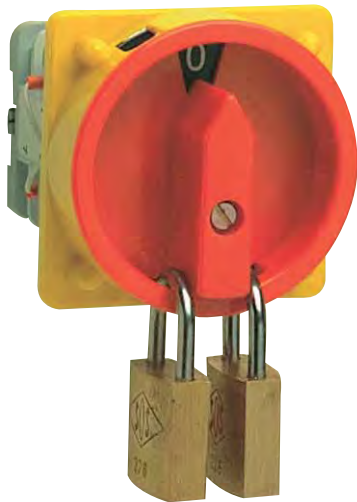
single-phase unit

| Description | P/N |
|-------------------------------|-------------|
| 110 V VY 20/D/012/RAMT-110/ST | 0511 499.15 |
| 230 V VY 20/D/012/RAMT-230/ST | 0504 492.10 |

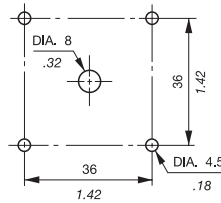
three-phase unit

| Description | P/N |
|-------------------------------|-------------|
| 110 V VY 20/D/014/RAMT-110/ST | 0511 500.22 |
| 230 V VY 20/D/014/RAMT-230/ST | 0504 493.11 |
| 400 V VY 20/D/014/RAMT-400/ST | 0504 494.12 |

main switch with round padlocking



DRILLING



use 1 to 3 padlocks
with stirrup DIA. 8 .32 max.

This mounting allows **locking in one position only**, by 1 to 3 padlocks.

This unit has the same 4-screw mounting and the same feature as the standard unit.

(expect watertight IP 44)

- 4 protection against penetration of solid bodies of more than 1 mm
- 4 protection against water jets
NEMA 2.

For ordering :

single-phase unit

VY 20 / D / 012 RAMT / SA 39 R / SV 45

0504 599.23

three-phase unit

VY 20 / D / 014 RAMT / SA 39 R / SV 45

0504 497.15

for 400 V

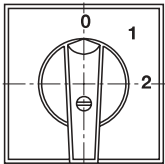
0504 600.10

for 230 V

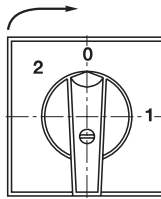
Note : specify the voltage of the coil
(110 V, 220 V or 380 V).

NOTE : This unit is delivered with a cover protecting the incoming terminals.

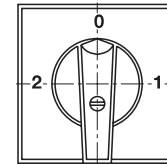
other possible switching arrangements



Unit with 3 positions.
Positions 1 and 2 are
reset at 0 on voltage
failure.



Unit with 3 positions.
Position 1 reset at 0
on voltage failure,
position 2 push-turn
impulsion.



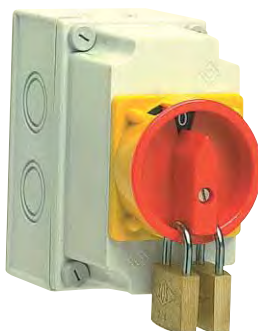
Unit with 3 positions.
Position 1 reset at 0
on voltage failure,
position 2 push-turn
fixed.

switches mounted in IP 65 watertight enclosure

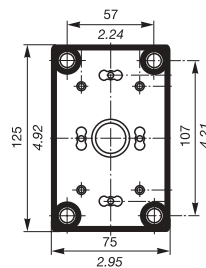
mounting with standard switch



mounting with main switch



DRILLING for mounting of enclosure



DIA. of holes : 4.5 .18

Enclosure dimensions :

- single-phase units 4.92 x 2.95 x 2.95
125 x 75 x 75

- three-phase units 4.92 x 2.95 x 3.94
125 x 75 x 100

These units can be mounted in a watertight

IP 65 "M" type enclosure with double insulation

- 6 protection against dust penetration
- 5 protection against water jets.
NEMA 4

For ordering :

single-phase unit

standard switch

VY 20 / D / 012 RAMT / ST

0504 492.10

for 230 V

main switch

VY 20 / D / 012 RAMT / SA 39 R / M

0504 594.16

for 230 V

three-phase unit

standard switch

VY 20 / D / 014 RAMT / ST

0504 493.11

for 230 V

0504 494.12

for 400 V

main switch

VY 20 / D / 014 RAMT / SA 39 R / M

0504 597.11

for 230 V

0504 598.22

for 400 V

Note : specify the voltage of the coil
(110 V, 220 V or 380 V) and the
frequency 50 or 60 Hz

interruptible plug sockets with manual safety control

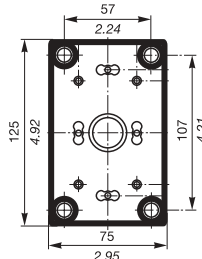
SIMPLE MODEL WITH SINGLE-PHASE SOCKET 2 P+T 10/16 A - 250 V according to NFC 61 303 standards

Enclosure dimensions : 125 x 75 x 75
4.92 x 2.95 x 2.95

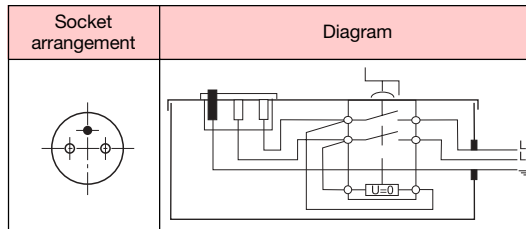


bundle of wiring length 1 m (without plug)

DRILLING
for fixation of enclosure



DIA. of holes : 4.5 .18



These units can be mounted in an "M" type enclosure with controlled plug socket.
The socket is controlled by the switch.
The unit and its plug socket are delivered wired in the enclosure.

This assembly can be used to equip an existing installation with a safety system.

ADVANTAGES : minimum modification and at the least cost.

SIMPLE MODEL WITH SINGLE-PHASE SOCKET

- Characteristics

- Rated thermal current 20 A (limited to 16 A by the sockets) for an electrical life of 5.10⁴ operations
- IEC 408 standard : AC 3 single-phase 3 kW - 220 V.
- Voltage supply of reset cell electromagnet : 220 V - 50 Hz.
- Rated voltage of socket (2 P+T) : 250 V for 10/16 A according to **NFC 61303** standard, leaflet VI A (other types available on request).

- Connection

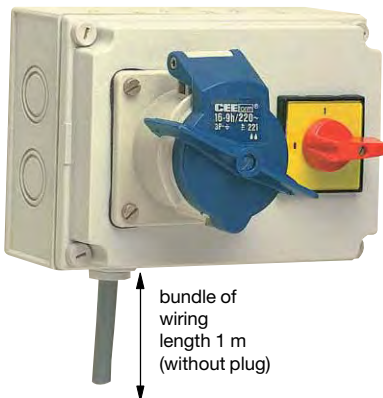
Wire with 3 - 2.5 mm² conductors

For ordering :

VY 20 / D / 012 RAMT / ST / M / 2 P+T
Electromagnet voltage : 220 V

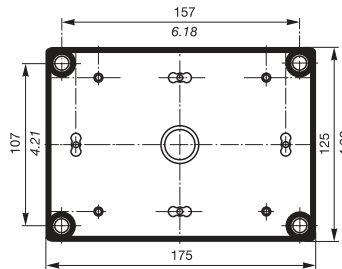
IP 65 WATERTIGHT MODEL WITH SINGLE-PHASE OR THREE-PHASE SOCKETS according to NFC 61 310 and CEE 17 standards

Enclosure dimensions : 175 x 125 x 75
6.89 x 4.92 x 2.95



bundle of wiring length 1 m (without plug)

DRILLING
for fixation of enclosure



DIA. of holes : 4.5 .18

IP 65 WATERTIGHT MODEL WITH SINGLE-PHASE OR THREE-PHASE SOCKETS

- 6 protection against dust penetration
- 5 protection against water jets NEMA 4

- Characteristics

- Rated thermal current 20 A (limited to 16 A by the sockets) for an electrical life of 5.10⁴ operations
- IEC 408 standard :

| | | |
|------|--------------|----------------|
| AC 3 | single-phase | 3 kW - 220 V |
| | | 4 kW - 380 V |
| | three-phase | 4 kW - 220 V |
| | | 7.5 kW - 380 V |
- UL 508 standard

| | | |
|--|--------------|---------------|
| | single-phase | 1 HP - 120 V |
| | | 2 HP - 240 V |
| | three-phase | 5 HP - 240 V |
| | | 10 HP - 480 V |

- Voltage supply of reset coil :
220 V - 50 Hz other voltages on request
380 V - 50 Hz (e.g. 110 V - 60 Hz)
(specify the voltage when ordering)

- Rated voltage of sockets :
2 P+T, 3 P+T, 3 P+N+T : 220 V - 16 A
2 P+T, 3 P+T, 3 P+N+T : 380 V - 16 A
according to **NFC 61 310** and **CEE 17** standards (other types available on request).

- Connection

Wire with 3 - 2.5 mm² conductors
or 4 - 2.5 mm² conductors
or 5 - 2.5 mm² conductors
according to the socket mounted.

For ordering :

VY 20 / D / 012 RAMT / ST / MH / 2 P+T
VY 20 / D / 014 RAMT / ST / MH / 3 P+T
VY 20 / D / 014 RAMT / ST / MH / 3 P+N+T

Note : specify the voltage of the coil (110 V, 220 V or 380 V) and the frequency 50 or 60 Hz

| Socket types | Voltage and plug arrangement of sockets | | Diagrams |
|-------------------------|-----------------------------------------|-------|----------|
| | 220 V | 380 V | |
| Single-phase 2 P + T | | | |
| Three-phase 3 P + T | | | |
| | 3 P + N + T | | |